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IN THE CLAIMS

The pending unamended claims are reproduced below.

1. (PREVIOUSLY PRESENTED) A computer-implemented system of developing multi-tier business applications, comprising:

an Integrated Development Environment (IDE), executed by a computer, for creating and maintaining a multi-tier business application on a multiple tier computer network, wherein the IDE includes a Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of an event that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model, wherein the Interactive Agent operates from a knowledge base stored as a part of the Meta-model, and the knowledge base is structured in such a way that the occurrence of the event causes the Interactive Agent to access the knowledge base to identify context information comprising a list of suggested and recommended actions for the event, in order to trigger a display of a graphical element including the context information in the Composer to interact with the developer.

2. (ORIGINAL) The system of claim 1, wherein the Interactive Agent includes a Novice mode, and the Interactive Agent is triggered in the Novice Mode when an event occurs that is selected from a group comprising:

- opening a new window;
- adding a new type of graphical element to a window;
- repeatedly adding a same type of graphical element to a window;
- transitioning from one window to another window;
- defining more than a predetermined number of tiers;
- defining less than a predetermined number of tiers;
- defining more than a predetermined number of workstations;
- defining less than a predetermined number of workstations;
- defining more than a predetermined number of applications;
- defining less than a predetermined number of applications;

defining more than a predetermined number of data paths;
defining less than a predetermined number of data paths;
failure to use a specified feature in a window; and
an apparent non-awareness of a specified feature in a window.

3. (CANCELED)

4. (PREVIOUSLY AMENDED) The system of claim 1, wherein the possible non-optimization is determined by examining attributes of the multi-tier business application stored within the Meta-model.

5. (ORIGINAL) The system of claim 1, wherein the Meta-model is updated and kept in synchronization with any updates made to the multi-tier business application via the Composer window.

6. (PREVIOUSLY AMENDED) A computer-implemented method for developing multi-tier business applications, comprising:

creating and maintaining a multi-tier business application on a multiple tier computer network using an Integrated Development Environment (IDE) executed by a computer, wherein the IDE includes a Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of an event that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model, wherein the Interactive Agent operates from a knowledge base stored as a part of the Meta-model, and the knowledge base is structured in such a way that the occurrence of the event causes the Interactive Agent to access the knowledge base to identify context information comprising a list of suggested and recommended actions for the event, in order to trigger a display of a graphical element including the context information in the Composer to interact with the developer.

7. (ORIGINAL) The method of claim 6, wherein the Interactive Agent includes a Novice mode, and the Interactive Agent is triggered in the Novice Mode when an event occurs that is selected from a group comprising:

- opening a new window;
- adding a new type of graphical element to a window;
- repetitiously adding a same type of graphical element to a window;
- transitioning from one window to another window;
- defining more than a predetermined number of tiers;
- defining less than a predetermined number of tiers;
- defining more than a predetermined number of workstations;
- defining less than a predetermined number of workstations;
- defining more than a predetermined number of applications;
- defining less than a predetermined number of applications;
- defining more than a predetermined number of data paths;
- defining less than a predetermined number of data paths;
- failure to use a specified feature in a window; and
- an apparent non-awareness of a specified feature in a window.

8. (CANCELED)

9. (PREVIOUSLY AMENDED) The method of claim 6, wherein the possible non-optimization is determined by examining attributes of the multi-tier business application stored within the Meta-model.

10. (ORIGINAL) The method of claim 6, wherein the Meta-model is updated and kept in synchronization with any updates made to the multi-tier business application via the Composer window.

11. (PREVIOUSLY AMENDED) An article of manufacture comprising a computer-readable device or medium embodying instructions that, when read and executed by a computer, results in the computer performing a method for developing multi-tier business applications, the method comprising:

creating and maintaining a multi-tier business application on a multiple tier computer network using an Integrated Development Environment (IDE) executed by the computer, wherein the IDE includes a Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of an event that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model, wherein the Interactive Agent operates from a knowledge base stored as a part of the Meta-model, and the knowledge base is structured in such a way that the occurrence of the event causes the Interactive Agent to access the knowledge base to identify context information comprising a list of suggested and recommended actions for the event, in order to trigger a display of a graphical element including the context information in the Composer to interact with the developer.

12. (ORIGINAL) The article of manufacture of claim 11, wherein the Interactive Agent includes a Novice mode, and the Interactive Agent is triggered in the Novice Mode when an event occurs that is selected from a group comprising:

- opening a new window;
- adding a new type of graphical element to a window;
- repetitiously adding a same type of graphical element to a window;
- transitioning from one window to another window;
- defining more than a predetermined number of tiers;
- defining less than a predetermined number of tiers;
- defining more than a predetermined number of workstations;
- defining less than a predetermined number of workstations;
- defining more than a predetermined number of applications;
- defining less than a predetermined number of applications;
- defining more than a predetermined number of data paths;
- defining less than a predetermined number of data paths;
- failure to use a specified feature in a window; and
- an apparent non-awareness of a specified feature in a window.

13. (CANCELED)

14. (PREVIOUSLY AMENDED) The article of manufacture of claim 11, wherein the possible non-optimization is determined by examining attributes of the multi-tier business application stored within the Meta-model.

15. (ORIGINAL) The article of manufacture of claim 11, wherein the Meta-model is updated and kept in synchronization with any updates made to the multi-tier business application via the Composer window.